

MEMORANDUM

SUBJECT: Water Quality Standards for the Navajo Nation

TO: Navajo Nation File

FROM: Phil Woods
Standards and TMDL Office, WTR-2

On January 23, 2006, EPA announced its approval of the Navajo Nation's application for the Treatment in the Same Manner as a State (TAS) to administer the water quality standards and certification programs under Section 303 and 401 of the Clean Water Act (CWA).

The Navajo Nation submitted water quality standards (WQS) to EPA on November 22, 1999, as part of its CWA eligibility application. Pursuant to Section 7 of the Endangered Species Act (ESA) and 50 CFR Part 402, EPA found that the approval of the standards would be unlikely to adversely affect federally-listed species. This finding covered the waters of the Navajo Nation, which is the largest Indian reservation in the United States. We initiated a formal consultation with the U.S. Fish and Wildlife Service (Service) on August 28, 2000, regarding our anticipated action on the 1999 standards. On December 26, 2001, the Service transmitted its biological opinion with the determination that an EPA action to approve the standards is unlikely to jeopardize the threatened or endangered species identified in the Navajo Nation.

On May 13, 2008, the Resources Committee of the Navajo Nation Council approved amendments to the Navajo Nation Surface Water Quality Standards. This action was certified by the Navajo Nation Attorney General on July 30, 2008. On August 22, 2008, S. Deb Misra, Director, Surface and Ground Water Protection Department, Navajo Nation Environmental Protection Agency, transmitted these WQS materials to EPA for approval. Unfortunately, these WQS amendments lost their way, and substitute copies reached WTR-2 in early December 2008.

BACKGROUND

The Navajo Nation WQS were originally developed based on an electronic (disc) copy of the Arizona Department of Environmental Quality's (ADEQ) water quality standards from the early 1990s. The Navajo Nation (NN) modified these WQS to develop their 1999 WQS. (See our March 21, 2006 memorandum to the Navajo Nation File supporting EPA's March 23, 2006 approval letter.) (Attachment 1) The NN adopted 2004 WQS; however, because they did not yet have TAS, the 2004 WQS were never submitted to EPA for approval. The NN's "2007 version" (adopted in May 2008) includes updated priority pollutant numbers based on the 2002 EPA published 304(a) criteria guidance with some more recent amendments.

The Navajo Nation has an antidegradation policy that is consistent with 40 CFR 131.12. The NN also has some implementation measures that were somewhat improved over the 1999 implementation measures.

In the 2007 revisions, the NN added a Narrative Nutrient Standard Implementation Plan for its

lakes and reservoirs. These revisions provide quantitative targets for chlorophyll-a, blue green algae count, pH, Secchi depth, total N and P, DO, etc., and are consistent with the national nutrient standards guidance and the nutrient standards adopted by AZ in December 2008. Although these nutrient standards are a substantial step forward toward regulating nutrients in NN lakes and reservoirs, they need to be supplemented by implementation measures so that site-specific controls can be applied to sources of nutrients that adversely effect these waters. We are asking the NN to clarify the implementation of these nutrient criteria to assure full protection of the designated uses of these waters. In the interim, we will assume that the more stringent end of the adopted ranges will be applied in implementing the nutrient criteria.

In 2004, the NN consolidated its aquatic life uses as Aquatic and Wildlife Habitat (A&WHbt) for all tribal waters. (For some parameters they continue to distinguish between cold water and warm water; however, for most parameters, the 2007 criteria match current EPA criteria to protect aquatic life in any fresh waters.) The 2007 revisions retained that comprehensive use designation. The NN also updated their criteria to protect human health to be consistent with EPA's current criteria guidance. In addition, the NN clarified their standards so that the Fish Consumption (FC), Secondary Human Contact (ScHC), A&WHbt, and Livestock Watering (LW) uses and the criteria to protect those uses are applicable in all waters of the Navajo Nation.

In 2004, the NN replaced the fecal coliform standards from 1999 with e coli standards based on EPA's 1986 criteria guidance. They applied a geometric mean of 126 cfu to all waters. Primary Human Contact (PrHC) waters have a single sample max of 235 cfu (frequent contact guidance), and ScHC waters have an SSM of 576 (changed to 575 in 2007) corresponding to "infrequent use".

In 2004, the NN included the "2002 Review, Water Quality Standards for Salinity, Colorado River System, Colorado River Basin Salinity Control Forum, in their standards. In 2007, they updated that reference to include the 2005 Review.

In 2004, the NN replaced their single value turbidity standards (based on ADEQ) with a change in turbidity limit not to exceed 10 NTU and a suspended solids standard of 80 mg/l. In 2007, the NN supplemented those standards with a SS standard of 25 mg/l for cold water.

In 2004, the NN added a prohibition of mixing zones for a specific list of persistent, bioaccumulative pollutants. That list was retained in 2007.

In 2004, the NN updated their table of numeric criteria for toxic pollutants to reflect EPA's 2002 criteria guidance as amended. In 2007, they re-organized their tables and also updated their cadmium criteria and added the current EPA methylmercury tissue criterion. .

Over time, for greater clarity, the NN has expanded the detail of their designated use table somewhat to individually name more waters rather than relying as heavily on its tributary rule.

ESA:

Section 7(a)(2) of the ESA states that each federal agency shall ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species (listed species) or result in the destruction or adverse modification of critical habitat. On December 2008, EPA initiated informal consultation concerning our current WQS action by obtaining a verification that the current list of species

associated with NN waters did not contain aquatic species that were not part of the list of species in our original consultation with the FWS concerning WQS for NN waters. Pursuant to the August 2002 Memorandum of Agreement Between the Environmental Protection Agency, Fish and Wildlife Service, and National Marine Fisheries Service Regarding Enhanced Coordination Under the Clean Water Act and Endangered Species Act (MOA, EPA-823-R-02-003), EPA is consulting with FWS and NMFS on national CWA 304(a) criteria, including the nutrient criteria being revised through this current EPA action. The MOA provides that, during the national CWA consultations, EPA may approve water quality criteria that are identical or more stringent than the existing CWA 304(a) criteria, pending the results of the national consultations, and that such action will be covered by the national consultation.

The majority of the standards revisions subject to the current approval action effect only human health uses and, therefore, are not subject to ESA consultation.

The Navajo Nation=s process for approving its standards, including the Navajo 30-day public comment period, meetings, comments and response to comments are described in greater detail in the Navajo Nation=s August 22, 2008 letter and its attachments. (Attachments 2 and 5)

The Navajo Nation was the 34th tribe out of 563 federally recognized tribes nationwide to be approved to administer water quality standards and a certification program. Navajo Nation encompasses approximately 27,000 square miles within its reservation boundaries. The Navajo Nation shares its border with three surrounding states (Arizona, Utah, and New Mexico), and three tribes (The Hopi, the Zuni and Ute Mountain tribe.)

After reviewing the Navajo Nation=s 2007/8 WQS package, the Service=s December 26, 2001 biological opinion, the information that no new species have been designated to change the validity of that BO, and the NN=s TAS approval on January 23, 2006, we recommend approval of the WQS pursuant to Section 303(c) of the CWA and its implementing regulations at 40 CFR Part 131. This action is based on the determination that these water quality standards are consistent with the protection of public health and welfare, protection of water quality and the purposes of the CWA.

LIST OF ATTACHMENTS

- ATTACHMENT 1 - EPA Memorandum to the Files, dated March 21, 2006, supporting the March 2006 approval of the Navajo Nation Water Quality Standards.
- ATTACHMENT 2 - Navajo Nation=s August 22, 2008 cover letter transmitting the water quality standards to EPA. (Received by WTR-2 in December 2008.)
- ATTACHMENT 3 - Navajo Nation=s Attorney General issued a certification of the Navajo Nation=s standards on July 30, 2008
- ATTACHMENT 4 - Navajo Nation Surface Water Quality Standards 2007, Passed by Navajo Nation Resources Committee on May 13, 2008.
- ATTACHMENT 5 - Cover page for The NN ADMINISTRATIVE RECORD with respect to the 2007 Navajo Nation=s 2007 WQS adoption.